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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,436	06/30/2000	Eiji Muramatsu	Q59947	9744

7590 06/04/2003
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WASHINGTON, DC 20037-7060

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,436

Applicant(s)

MURAMATSU ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 7-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4 and 7-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed March 06, 2002.
Claims 5-6 were cancelled, claims 2,7 and 9-11 were amended and claims 14-23 were added, rendering claims 2-4 and 7-23 pending.

Claim Rejections – 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-4 and 7-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. 5,881,032) in view of Hirata et al (U.S. 5,242,729) further in view of Kanno (U.S. 6,103,331).
4. Ito teaches a string of pits and lands formed in a transparent substrate, which is coated to form each recording layer, where a transparent resin is injected between the first and second recording layers (column 2, lines 24-27). [Coating is analogous to laminating]. Ito further teaches the coated aluminum layer reflects light (column 2, lines 25-31). Ito discloses an information storage medium comprising plural recording layers wherein the spiral reproduction directions are opposite on different layers assigned to

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sectors at the same radial positions on different layers having a complementary relationship (column 4, lines 41-46). Ito discloses an information storage media in which the data recording grooves are formed on the first and second recording layers (column 9, lines 56-65) along with elevated and retracted grooves in Figure 12. Ito does not disclose where the grooves are thicker than the lands.

Hirata teaches a recording medium having a recording layer and a transparent substrate (column 3, lines 24-28) where the recording layer has thicker grooves than lands (column 11, lines 5-9). Ito and Hirata are analogous because they are both from the field of recording mediums. It would have been obvious to one of ordinary skill in the art to include thicker grooves than lands in the recording mediums of Ito because Hirata teaches thicker grooves and less thick lands help produce the proper reflectivity to provide reproduction in accordance with the CD standard (column 11, lines 5-9).

Neither reference explicitly teaches a recessed groove in the first recording layer and raised groove in the second recording layer. Kanno teaches optimizing (varying) the groove depth (column 6, lines 53-57) of a recording medium (column 6, line 7). All of the references are analogous art because they are from the field of recording mediums. It would have been obvious to one of ordinary skill in the art to vary the grooves of Ito because Kanno teaches the structure and composition of the recording medium greatly affect the groove. Furthermore, it would have been obvious to one of ordinary skill in the art for the grooves of Ito to be recessed and raised, as instantly claimed because it would have been obvious to one of ordinary skill in the art to reverse the grooves of the

first and second layers, because a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, USPQ 167.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Okuyama et al (U.S. 5,793,723) teaches adjusting the groove depth of an optical disk so the reflected laser beam(s) from adjacent tracks are not at the same intensity (column 2, lines 28-40).

Response to Arguments

6. Applicant's remarks to the rejection made under 35 USC 112, second paragraph have been considered and are overcome due to Applicant's arguments.

Applicant's remarks to the rejection made under 35 USC 103(a) as being unpatentable over Ito et al. U.S. (5,881,032) in view of Hirata et al (U.S. 5,242,729) have been considered but are moot based on grounds of new rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

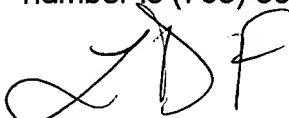
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

